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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,819	12/31/2003	William P. Alberth JR.	CS23362RL	9363

20280 7590 11/18/2005

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EXAMINER	
LEVITAN, DMITRY	

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/749,819	ALBERTH ET AL.	
	Examiner	Art Unit	
	Dmitry Levitan	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-14 and 16-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-14 and 16-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 June 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Amendment, filed 10/28/05, has been entered. Claims 1-6, 8-14 and 16-21 remain pending.

Drawings

1. The drawings were received on 06/12/04. These drawings are not approved because of a typographical error on Fig. 4: storage element 203 instead of 208.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. Claims 1, 3-6, 9, 10, 12-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selby (US 4,876,738) in view of Dent (US 6,542,716).

3. Regarding claims 1, 9 and 10, Selby teaches a method and apparatus for maintaining registration information for a plurality of different communications areas within a network (mobile stations M shown on Fig. 1 and 2, registered with base stations BS in corresponding service areas 6:13-25) comprising:

Registering in a first communication area, where the wireless communication unit is located (station M1 is registered with service area SA1 on Fig. 1 and 6:22-25),

Moving into a second communication area, which is different than the first communication area (M1 moving to another service area SA2 and registering with it 6:36-50),

Registering in the second communication are, while retaining at least the most recent prior registration associated with the previous communication area (keeping the registration with a previous service area 6:50-7:11), wherein the default operating mode include retaining at least the two most recent area registrations (M1 created for itself new area comprising SA1 and SA2 7:11-20).

Selby does not teach associating each communication area with a different paging group and paging group area detect module.

Dent teaches associating each communication area with a different paging group and paging group area detect module (paging areas with different paging area IDs and mobile unit re-registration when the need to changing paging are ID is detected 9:62-10:12 and mobile units inherently comprising paging area detecting module, because detecting paging area ID is essential for the system operation).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add paging groups and paging group area detector of Dent to the system of Selby to improve the system operation with a satellite communication system, wherein communication areas are define by paging groups.

In addition, regarding claims 9 and 10, Selby teaches retaining previous registrations automatically without any specific instructions or service option control message (flow chart on Fig. 3 disclosing the operation of a mobile unit as described above in claim 1 rejection and item 27 on the flow chart of Fig. 3, wherein the mobile unit receives by broadcast a new number of registrations, inherently overriding an old/default value 11:5-6 and 7:20-23).

4. Regarding claim 3, Selby teaches a method comprising moving back into the first communication are, without registering in the first communication area, when the registration from the user's prior presence in the first communication area is still retained (When M1 roam back into SA1, it does not register with SA1, because it is still registered with SA1 7:5-11).

5. Regarding claims 4-6, Selby teaches a method comprising moving to a third communication area, different from the first and the second, while retaining the registration from

at least the previous area within which the user was most recently located (registering in a maximum number of n areas and storing the registrations 7:21-31) and discarding any registration not associated with the present area and the most previous areas and associated with the least recent previous area (if the numbers of stored registration will exceed n, deleting the oldest stored identity 7:31-40).

6. Regarding claims 12 and 21, Selby teaches a wireless communication device comprising (mobile station on Fig. 2 and 10:15-45 of cellular system on Fig.1):

A transceiver adapted for communication with a network (transmitter 1 and receiver 2 on Fig. 2 and 10:15-19),

A processor coupled to the transceiver (processor 4 and program store 5 on Fig. 2 and 10:20), the processor including

An area detection module adapted for detecting the area in which the wireless communication device is located (inherently part of the processor, because detecting the location area for a mobile station is essential for the station to register with the corresponding base station of the area as shown on Fig. 1 and 6:13-35), and

A registration module adapted for registering the wireless communication device with the network (inherently part of the processor, because registration of the mobile station with the corresponding base station of the area as shown on Fig. 1 and 6:13-35), and

A storage element coupled to the processor and adapted for retaining registration information for a plurality of areas (storage means 6-10 to store registration records 10:40-45, as retaining registration information for a plurality of areas was disclosed in the rejection of claim 1).

7. Regarding claim 13, Selby teaches a processor including a registration discard module adapted for discarding registration associated with areas in which the wireless communication device was recently located, when the number of registrations exceeds the number of registration being retained (inherently part of the processor 4 and program store 5 on Fig. 2, because Selby teaches deleting the oldest registration when the number of the registrations exceeds n 7:28-34).

8. Regarding claim 14, Selby teaches a processor including a comparison module adapting for comparing the area in which the wireless device is located with the registration information retained within the storage element, wherein if a registration associated with the current location of the wireless device is not retained in the storage area, then producing a control signal adapted for initiating a registration by the registration module (inherently part of processor 4 and program store 5 on Fig. 2, because Selby teaches a mobile station producing a registration signal, when it is located in a service are, the identity of which is not stored in the mobile station storage element, effectively comparing the current storage area with the storage record 1:53-2:8).

9. Regarding claim 16, Selby teaches a module of said processor includes a set of prestored instructions (program store 5 on Fig. 2 and 10:17-23).

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Purnadi (US 6,708,031).

Regarding claim 2, Selby teaches all the limitations of the parent claim 1.

Selby does not teach associating each communication area with different packet zone identification.

Purnadi teaches associating each communication area with a different packet zone identification (broadcasting a Packet Zone ID to mobile stations to identify their communication area by different Packet Zone ID 6:35-7:36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add associating each communication area with a different packet zone identification of Purnadi to the system of Selby to make the system compatible with widely used cdma2000 networks by utilizing cdma2000 Packet Zone ID method.

11. Claims 8 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Frid (US 6,560,239).

Regarding claims 8, 18 and 19, Selby teaches all the limitations of the parent claims 1 and 12.

Selby does not teach registration to support a packet data communication in the associated area and the mobile unit processor including packet data and packet data voice modules.

Frid teaches registration to support a packet data communication in the associated area (mobile unit DTE/MS 130 on Fig. 1 establishing the parameters of computer/packet data communication protocol during registration 6:31-43) and the mobile unit processor including packet data and packet data voice modules (inherently part of DTE/MS 130 on Fig. 1, because it supports both packet data/DTE and voice communications, including voice over IP 4:53-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Frid to the system of Selby to make the system compatible with widely used packet data and voice systems.

Regarding claim 17, Selby teaches all the limitations of the parent claim 12.

Selby does not teach storing some of the prestored instructions in the storage element.

Frid teaches storing some of the prestored instructions in the storage element (storing necessary instructions for the mobile unit processor in memory 135 on Fig. 1 and 4:33-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Frid to the system of Selby to make the system faster by storing rarely used instructions outside the mobile unit's processor.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Frid in further view of Purnadi.

Selby in view of Frid teaches all the limitations of the parent claim 18.

Selby in view of Frid does not teach utilizing CDMA in the system.

Purnadi teaches using CDMA standard (cdma2000 packet switched network on Fig. 3 and 4:44-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add utilizing CDMA of Purnadi to the system of Selby in view of Frid to improve the system compatibility with widely used standard.

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby.

Selby teaches a method and apparatus for maintaining registration information for a plurality of different communications areas within a network (mobile stations M shown on Fig. 1 and 2, registered with base stations BS in corresponding service areas 6:13-25) comprising:

Registering in a first communication area, where the wireless communication unit is located (station M1 is registered with service area SA1 on Fig. 1 and 6:22-25),

Moving into a second communication area, which is different than the first communication area (M1 moving to another service area SA2 and registering with it 6:36-50),

Registering in the second communication are, while retaining at least the most recent prior registration associated with the previous communication area (keeping the registration with a previous service area 6:50-7:11), wherein the default operating mode include retaining at least the two most recent area registrations (M1 created for itself new area comprising SA1 and SA2 7:11-20). Selby also teaches deleting the service registration record in the mobile station when the mobile station is out of communication range of any of the base stations 7:56-8:17.

Selby does not teach discarding any previous stored registrations on powering up and powering down.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add discarding any previous stored registrations on powering up and powering down to the system of Selby to make the system more flexible by manual implementation of the discarding any previous stored registrations of Selby. This feature will give more control of the mobile telephone to a user, as it is common to reinitialize/refresh a device with a memory on powering up and powering down.

Response to Arguments

14. Applicant's arguments filed 10/28/05 have been fully considered but they are not persuasive.

On page 6 of the Response, Applicant argues that teachings of Selby and Dent are not combinable and inconsistent with individual teachings.

Examiner respectfully disagrees.

Selby teaches a mobile radio station for maintaining registration information for a plurality of different communications areas within a cellular network, as shown on Fig. 1.

Dent teaches a mobile radio station associating each communication area with a different paging group operating in a satellite system, as shown on Fig. 1 of Dent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Selby and Dent in one mobile radio station to combine the registration advantages of Selby and traditional registration with different paging groups of Dent to make the mobile radio station register in cellular and satellite environment.

Examiner does not see a contradiction in maintaining separate registration methods for cellular and satellite systems.

Because the size of the cells in a system of Selby, wherein the radio station experience frequent change of the cells, is much smaller than the size of the spot beam coverage of a satellite (Dent 2:50-53 100-1000 km) it make sense to keep two separate registrations methods for separate systems.

On page 8 of the Response, Applicant argues that it is not obvious to discard previous registration on the system power up and power down and requested evidence to support the rejection of claim 11.

Examiner respectfully disagrees.

Selby teaches deleting the service registration record in the mobile station when the mobile station is out of communication range of any of the base stations 7:56-8:17.

Lawrence (US 6,628,935) teaches deleting the stored messages in a mobile device upon the power up/down 2:12-34 to save memory space in the mobile device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add discarding any stored information on powering up and powering down of Lawrence to the system of Selby to make the system more flexible by manual implementation of the discarding any previous stored registrations of Selby. This feature will give more control of the mobile telephone to a user to clear the memory in a mobile device if the memory is needed for other functions.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

Dmitry Levitan
Patent Examiner.
11/08/05

JOHN PEZZLO
PRIMARY EXAMINER